

DL101-003

Work Order ID 161618

Tuesday, July 18, 2017 12:52:14 PM

161618

Page 1

Item ID: D2938-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Saddle LH Out, 206

Start Date: 6/14/2017 Start Qty: 6.00

6

Cust Item ID:

Required Date: 7/3/2017 Req'd Qty: 6.00

6

Customer:

Reference: ~~(P.A.)SCHEDULED/S~~

Approvals:

Process Plan:

DAS
21
9-89

Date:

JUL 18 2017

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2938

Rev C

100

1.12

100

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

4.26

HAAS CNC vertical machine #1

Program part number and batch number.

- 1-Inspect part number and batch number are programmed correctly.
- 2-Machine Step No 1 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet
- 3-Machine Step No 2 of Folio and visually inspect as per

110

0.00

110

CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.65

Conventional Milling Machine

Machine Keyway and inspect per attached dimension sheet

G

G

m 17/08/21
SBL 17/08/21m 17/08/21
SBL 17/08/21

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161618

Page 2

Item ID: D2938-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Saddle LH Out, 206
Start Date: 6/14/2017 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 7/3/2017 Req'd Qty: 6.00 ***6*** Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC1 Inspection performed by CMM QC2 Memo Inspect on CMM as per folio CMMA007. DWG REV: _____ CMM PROG. REV: _____	0.00 0.00				<u>6</u>	<u>0</u>		<u>on 17/08/21</u> <u>SBL 17/08/21</u>
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.12				<u>6</u>	<u>0</u>		<u>DAS</u> <u>17-08-22</u>
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.73				<u>(6)</u>	<u>0</u>		<u>2017-08-24</u> <u>JSC</u> <u>BEI3</u>

Work Order ID 161618

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Item ID: D2938-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Saddle LH Out, 206
Start Date: 6/14/2017 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 7/3/2017 Req'd Qty: 6.00 ***6*** Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150		0.00							
150 Powdercoat Powder Coating	<i>m 138014.</i> Memo START TIME: <i>3:40</i> OVEN TEMP: <i>300°</i> FINISH TIME: <i>4:10.</i>	0.61				<i>6</i>	<i>φ</i>	<i>1708-28.</i>	<i>DAS 9-89</i>
160	QC3- Inspect Part Finish	0.00							
160 QC Quality Control	Memo	0.06				<i>6</i>			<i>DAS 9-89</i> <i>AUG 23 2017</i>
170	Identify as per dwg & Stock Location	0.00							
170 Packaging Packaging	Memo	0.06				<i>6</i>			<i>DAS 9-89</i> <i>AUG 29 2017</i>

Work Order ID 161618

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Item ID: D2938-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Saddle LH Out, 206
Start Date: 6/14/2017 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 7/3/2017 Req'd Qty: 6.00 ***6*** Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.60							
Quality Control									

DAS
21
9-88

AUG 29 2017

Picklist Print

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Page 1

Work Order ID: 161618

161618

Parent Item: D2938-1

D2938-1

Parent Item Name: Saddle LH Out, 206

Start Date: 6/14/2017

Required Date: 7/3/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP: B 00.06.26 New DWG rev (mpp 2069)EC
IPP Rev:C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-003		Manufactured	No			100	Each	27.0000	1	6			
D6101-003									**				
Saddle Billet, 7075													

Location

Loc Qty

Loc Code

MAT040

20

161598

20

MAT046

7

162144

7

Q SBL 2017/08/20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

DART AEROSPACE LTD	Work Order:	161618
Description: 206 Saddle, Outboard, Left side	Part Number:	D2938-1
Inspection Dwg: D2938 Rev. C		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. C and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.100	0.140		.130	.130	.130	.129		
B	0.100	0.140		.130	.130	.130	.129		
C	0.100	0.140		.120	.121	.119	.120		
D	0.210	0.230		.228	.228	.228	.228		
E	1.245	1.255		1.250	1.250	1.250	1.250		
F	1.245	1.255		1.250	1.250	1.250	1.250		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		.512	.512	.512	.512		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.500	2.500	2.500	2.500		
K	0.257	0.262		.258	.258	.258	.258		
L	0.312	0.317		.314	.314	.314	.314		
M	0.235	0.240		.238	.238	.238	.238		
N	0.100	0.140		.119	.118	.120	.119		
O	0.540	0.560		.548	.550	.550	.550		
P	0.490	0.510		.500	.500	.500	.500		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.740	2.742	2.740	2.740		
S	0.240	0.270		.260	.260	.260	.261		
T	0.100	0.180		.125	.127	.127	.125		
U	1.625	1.635		1.630	1.630	1.630	1.63		
V	1.362	1.372		1.367	1.367	1.367	1.367		
W	0.316	0.321		.318	.318	.318	.318		
X	1.250	1.270		1.260	1.260	1.260	1.260		
Y	1.565	1.585		1.575	1.575	1.575	1.575		
Z	0.178	0.198		.188	.188	.188	.188		
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject							DAS		

Measured by:	SBL
Date:	17/08/21

Audited by:	44
Date:	17-08-22

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM	

DART AEROSPACE LTD	Work Order:	161618
Description: 206 Saddle, Outboard, Left side	Part Number:	D2938-1
Inspection Dwg: D2938 Rev. C		Page 1 of 1

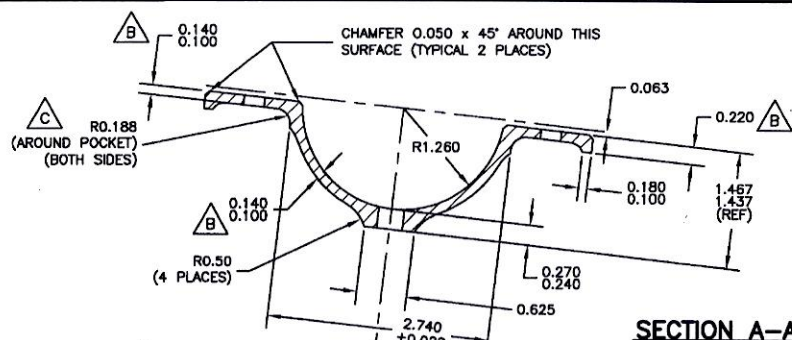
Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. C and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	#5	#6	3	4	By	Date
A	0.100	0.140		.130	.130				
B	0.100	0.140		.130	.131				
C	0.100	0.140		.120	.120				
D	0.210	0.230		.228	.228				
E	1.245	1.255		1.250	1.250				
F	1.245	1.255		1.250	1.250				
G	2.495	2.505		2.500	2.500				
H	0.510	0.515		.512	.512				
I	1.572	1.582		1.577	1.577				
J	2.495	2.505		2.500	2.500				
K	0.257	0.262		.258	.258				
L	0.312	0.317		.314	.314				
M	0.235	0.240		.238	.238				
N	0.100	0.140		.118	.118				
O	0.540	0.560		.550	.549				
P	0.490	0.510		.500	.499				
Q	3.715	3.725		3.720	3.720				
R	2.720	2.760		2.742	2.742				
S	0.240	0.270		.260	.260				
T	0.100	0.180		.125	.125				
U	1.625	1.635		1.630	1.630				
V	1.362	1.372		1.367	1.367				
W	0.316	0.321		.318	.318				
X	1.250	1.270		1.260	1.260				
Y	1.565	1.585		1.575	1.575				
Z	0.178	0.198		.188	.188				
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

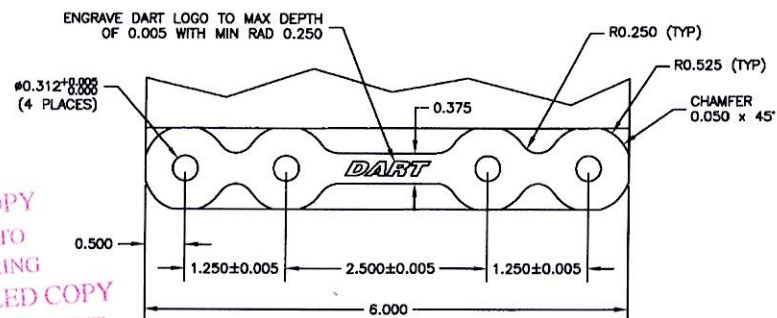
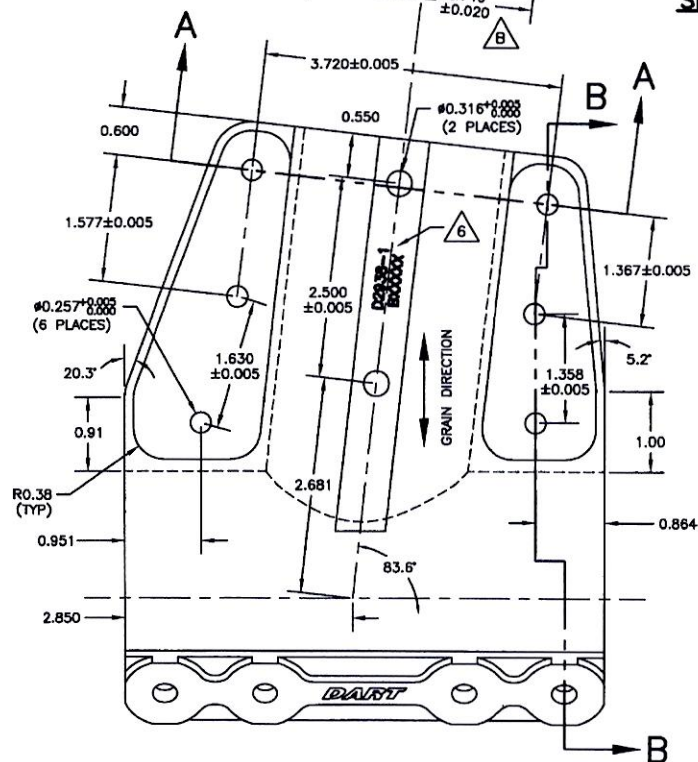
Measured by:	SBL
Date:	17/08/21

Audited by:	DAS 44
Date:	17-08-2022

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM	

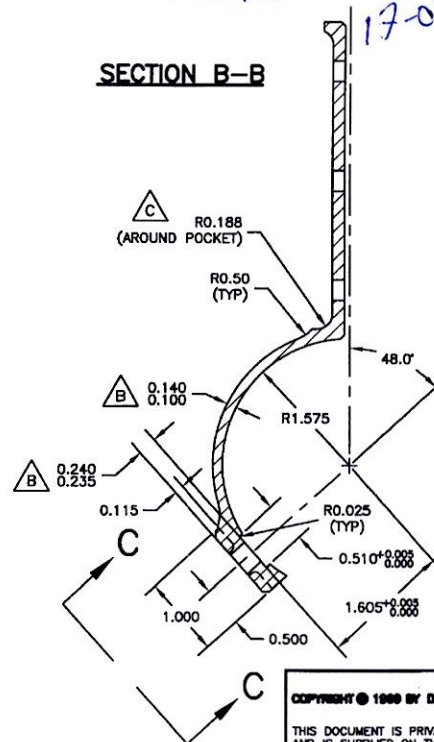


SECTION A-A



VIEW C-C

SECTION B-B



D2938-1 LH SADDLE (SHOWN)
D2938-2 RH SADDLE (OPPOSITE)

NOTES:

- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)
(MAKE FROM D6101-003 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP

C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	CH	DRAWN BY CB
CHECKED	PH	APPROVED
DATE	06.11.09	TITLE
		D2938
		SADDLE OUTSIDE

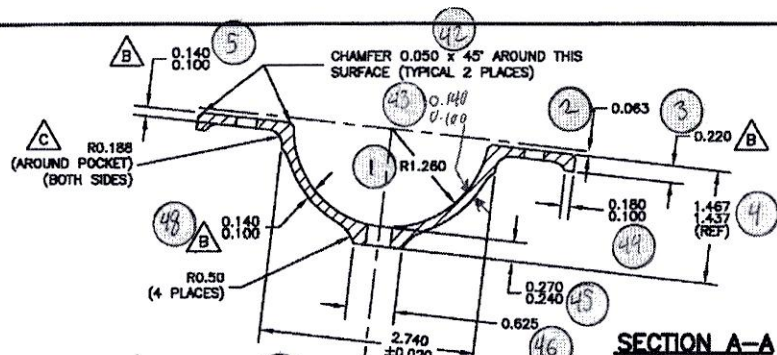
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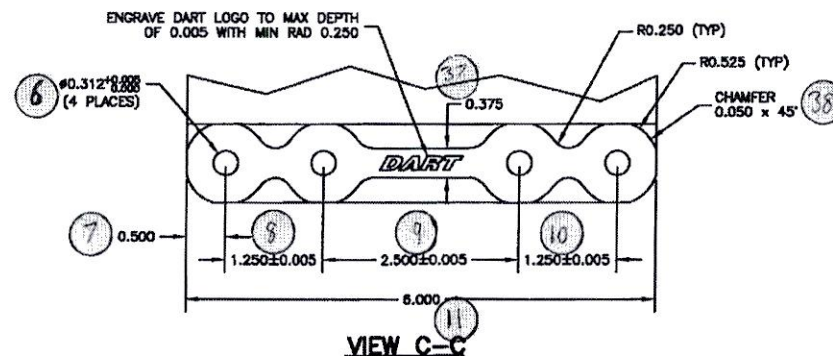
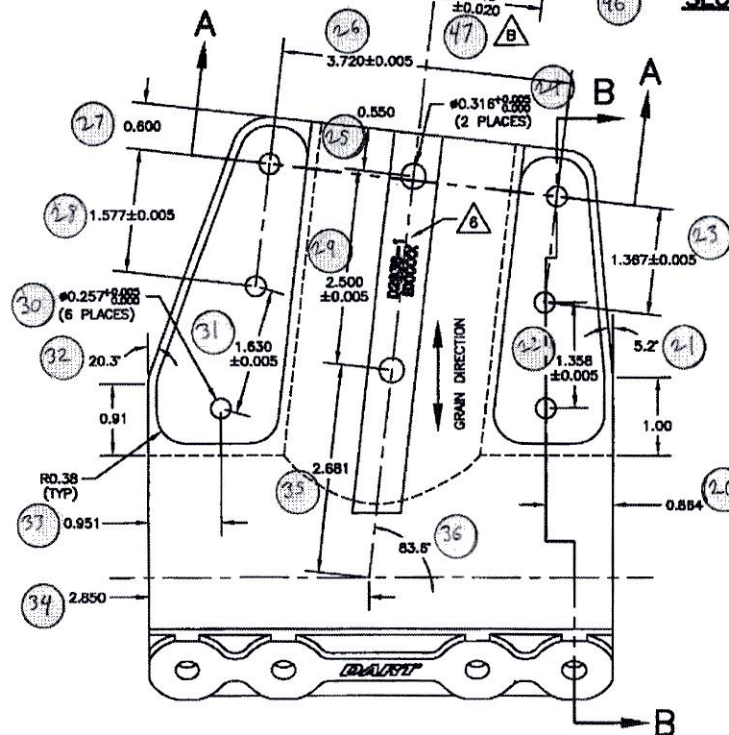
DART DART AEROSPACE USA, INC.
BELLINGHAM, WA

DRAWING NO. D2938
SHEET 1 OF 1
SCALE 2:3

07.02.12

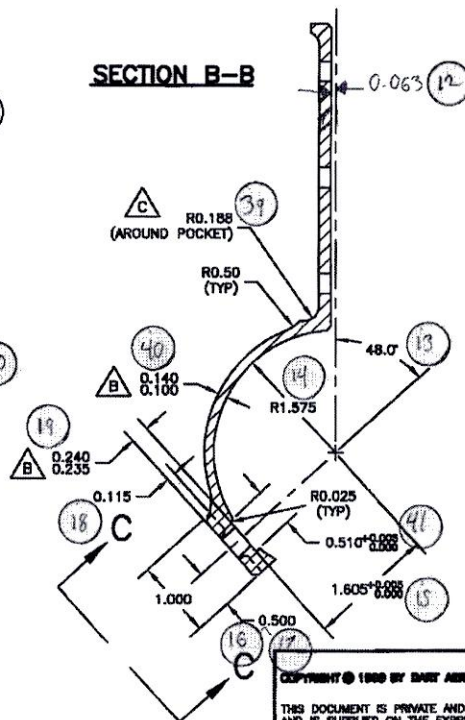


SECTION A-A



VIEW C-C

SECTION B-B



D2938-1 LH SADDLE (SHOWN)
D2938-2 RH SADDLE (OPPOSITE)

- NOTES:
- 1) MATERIAL: ALUMINUM 7075-T7351 (Q0-A-250/12)
(MAKE FROM D6101-003 SADDLE BILLET, 7075)
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
 - 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
 - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) ALL DIMENSIONS ARE IN INCHES
 - 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP

C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	4	DART DART AEROSPACE USA, INC.
DRAWN BY	CB	
CHECKED	PH	DRAWING NO. D2938
DATE	06.11.09	TITLE SADDLE OUTSIDE
		REV. C SHEET 1 OF 1 SCALE 2:3

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07.02.12